

Resume - IC Master

☰ Type

Altair R.

Senior Software Engineer

Full-Stack & Backend Systems | AI/ML, Cloud Infrastructure & Browser Automation

- **End-to-End Full-Stack Engineering:** Built frontend applications, backend APIs, data pipelines, AI integrations, and cloud infrastructure from early requirements through production.
- **Production Systems at Scale:** Engineered automation pipelines processing ~250,000 web records and medical-imaging systems handling 10,000+ records.
- **Hands-On Technical Ownership:** Progressed from Senior AI Engineer to Head of Engineering while remaining hands-on. Turned loosely defined executive and business objectives into production systems by working with AI leadership to translate high-level direction into business workflows, then defining the technical architecture, implementation plan, and delivery.

Core Competencies

Full Stack Development | Backend Development | Frontend Development |
Software Architecture |

API Design | Cloud Infrastructure | Infrastructure as Code | CI/CD |

Web Scraping | Web Crawling | Browser Automation | Chrome Profile Management |

Proxy Management | CAPTCHA Recognition | Python | JavaScript | TypeScript |

React.js | Next.js | Vue.js | FastAPI | Django | PostgreSQL | MongoDB |

Redis | Kafka | Elasticsearch | AWS | Terraform | Docker | Nginx |

GitHub Actions | pytest | TestContainers | AI Agent Systems | LLM Orchestration |
Deep Learning | Computer Vision | PyTorch | TensorFlow

Experience

Head of Engineering | UNIVERSA AI | 2024 – Present

Switzerland

Joined UNIVERSA AI as a Senior AI Engineer and later progressed to Head of Engineering as my technical scope expanded. I remain hands-on across full-stack development, browser automation, cloud infrastructure, data pipelines, and AI systems.

- **Built Automation Infrastructure:** Developed a configurable automation platform that processed ~250,000 forum posts into ~4,500 qualified leads while reducing manual analysis by approximately 75%.
- **Delivered Full-Stack Products:** Built and operated frontend applications, backend services, APIs, data workflows, persistent sessions, validation, reporting, and real-time operational monitoring.
- **Built Browser Automation Systems:** Developed browser automation infrastructure with human-like mouse and keyboard interaction, persistent Chrome profiles, proxy-backed sessions, authenticated workflows, and automated execution across web platforms.
- **Integrated Computer Vision into Automation:** Integrated a custom CNN-based CAPTCHA image classifier into browser workflows to automate CAPTCHA recognition and handling during web-data collection.
- **Integrated Payment Infrastructure:** Implemented Midtrans e-commerce checkout with QRIS payments, webhook and callback handling, payment-status reconciliation, and backend order-state updates.
- **Owned Cloud Infrastructure and Delivery:** Provisioned and maintained production infrastructure and owned CI/CD workflows for automated testing and deployment.
- **Co-built an AI Agent Framework:** Developed the company's in-house AI agent framework using state-machine orchestration to coordinate parallel LLM-

driven tasks with real-time execution visibility.

- **Worked Across Engineering, Research, and Business:** Collaborated with engineers, AI researchers, and business stakeholders to implement, integrate, and deliver production systems from defined product and technical requirements.

Senior Full-Stack Software Engineer | Aria Health / Dcentric Health Ltd | 2023 – 2024

Joined as engineer #3 on the founding team and owned product development across frontend, backend, data infrastructure, and authentication.

- **Built Medication Safety:** Developed a clinical system mapping patient FHIR allergy profiles against EU-wide pharmaceutical data to identify potential medication contraindications.
- **Delivered Enterprise Authentication:** Built OTP authentication, rate limiting, password denylisting, and NIST-aligned security controls to meet enterprise security requirements.
- **Standardized Frontend Development:** Built 50+ reusable React components and introduced shared design tokens and adoption guidelines, establishing a common component foundation across the platform.
- **Built Backend Data Pipelines:** Developed backend services and background workflows for FHIR records and pharmaceutical data, integrating asynchronous processing, caching, search, and automated data ingestion.
- **Worked Across Product and Clinical Teams:** Translated healthcare requirements into engineering solutions with clinical, product, data, and company stakeholders as the engineering team grew from 3 to 6.

Software Engineer | Cheeri / Divao LLC | 2022

Implemented features and reusable components for a civic-tech web application.

- **Integrated File Management:** Built file upload and download workflows through the Google Drive API.
- **Built Frontend Components:** Developed and customized reusable user-interface components using Vue.js.

AI / Full-Stack Software Engineer | ITS Research Lab, Institut Teknologi Sepuluh Nopember | 2019 – 2022

Delivered full-stack implementation for three healthcare AI systems covering brain MRI imaging, COVID-19 lung imaging, and dermatology consultation.

- **Moved AI Models into Production:** Built preprocessing and inference pipelines for deep-learning medical-imaging models, processing 10,000+ medical-imaging records.
- **Owned End-to-End Software Delivery:** Built web frontends, backend APIs, AI model integrations, and cloud infrastructure across three healthcare systems from requirements through hospital deployment.
- **Built Medical-Imaging Infrastructure:** Implemented DICOM/NIfTI ingestion, PACS integration, metadata mapping, and a custom medical-image viewer supporting multi-plane imaging and annotation.
- **Translated Clinical Requirements into Software:** Worked with researchers, radiologists, professors, and hospital stakeholders to turn domain requirements into technical scope and coordinate implementation with UI/UX and mobile contributors.

Open Source

GitLab Open-Source Contributor

Four merged community contributions spanning product code, bug fixes, and documentation, shipped across GitLab releases 17.2–17.4.

gitlab.com/altairrostan

Education

Bachelor of Science in Computer Science

Institut Sains dan Teknologi Terpadu Surabaya | 2015 – 2021

Top Skills

- Convolutional Neural Networks (CNN)

- Computer Vision
- Web Crawling

Languages

- Indonesian — Native or Bilingual
- English — Native or Bilingual

Recommendation

"[Insert a short recommendation demonstrating technical ability, ownership, and collaboration.]"

[Name] | [Title] | [Company] | [LinkedIn]